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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,586	05/16/2001	Kenneth C. Leighley	35669/148330	9880

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DRINKER BIDDLE & REATH
ONE LOGAN SQUARE
18TH AND CHERRY STREETS
PHILADELPHIA, PA 19103-6996

EXAMINER

JOHNSTON, PHILLIP A

ART UNIT PAPER NUMBER

2881

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,586

Applicant(s)

LEIGHLEY ET AL.

Examiner

Phillip A Johnston

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/21/03
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12-15. 6) ☐ Other: _____

Detailed Action

Examiners Response to Arguments

1. Applicants arguments are moot in view of new grounds for rejection.

Claims Rejection – 35 U.S.C. 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-22 as amended and newly added Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,029,252 to Ameseder in view of Whitehead, U.S. Patent No. 5,920,075 and in further view of Davidson, U.S. Patent No. 3,662,175.

Ameseder (252) discloses an apparatus for disinfection according to FIGS. 1 and 3-5 that comprises a visually attractive housing, advantageously of plastic, in which an ultraviolet ray generating light source 2 is provided. In the present case, it is in the form of a tube.

The housing 1 is provided according to FIG. 1 with a plurality of openings 3, in which the toothbrushes 4 may so be placed, that the brush heads 5 are located within the housing 1 and the handles 6 extend outside the housing 1. The UV-light source 2 is mounted according to FIG. 3 on the mounting plate 7 of the housing 1 and is connected by a wire 8 to a plug 9.

In FIG. 1 the housing 1 has been pivoted and swung shut on the mounting plate as illustrated in FIG. 3, and toothbrushes 4 comprising a brush head 5 and a handle 6 have been inserted into the openings 3.

In FIG. 1 is further illustrated in a partial arrangement the take-up frame 17, comprising prongs 22 and take-up openings 19 formed thereby, whereby in a take-up opening 19 the brush head 5 of a toothbrush 4 is inserted.

FIG. 3 illustrates the housing 1 swung open and without the receiving vessel 18 and take-up frame 17. The mounting plate 7 is provided with side pieces or arms 25, on which tracks 26 are arranged for the receiving vessel 18 according to FIG. 4. The mounting plate 7 further comprises a wall 33 provided with a light opening 34 for the light source 2 which is situated behind the wall.

On the side of the mounting plate 7 in the upper region of the side walls 26 which run to a point are located sensors 16, in particular infrared sensors, comprising infrared transmitters and infrared receivers. See Column 3, line 51-67; and Column 4, line 1-15.

It is inherent in Ameseder (252) that the plastic housing can be formed of a tinted translucent material, which absorbs UV light, as recited in Claim 6.

Ameseder (252) also discloses that from the depiction of the cross-section of the apparatus according to FIG. 9 it is clear that upon swinging shut the housing 1 onto the mounting plate 7 over hinge pin 38 according to FIG. 10 an enclosed disinfection chamber is formed, whereby within this disinfection chamber according to FIG. 9 the receiving vessel 18 with the associated take-up frame 17 is arranged. The receiving aperture 39 for instruments, toothbrushes or the like is in this manner accessible from above via the openings 3 in the housing.

The light source 2 is arranged according to FIG. 9 inclusive of the electronics in a receptacle 35 of the mounting plate 7, whereby a light opening 34 is provided in the mounting plate 7, through which UV-radiation is emitted into the housing 1. The receiving vessel 18 with take-up frame 17 and the non-exposed medical instruments, toothbrushes or the like inserted therein are thus located in the manner of a sliding unit or rack where they are very intensely exposed to the light source 2, so that in this manner a shadow-free, advantageous UV-irradiation is effected. See Column 5, line 3-23.

Ameseder (252) as applied above does not disclose the use of a means for physically obstructing finger access, as recited in Claim 1. However, Whitehead (075) discloses in FIG. 2 a perspective top view of the hand-held sterilization device 5 that includes a housing 10, a handle 20 coupled to the housing, and a power cord 40 that may be connected to a power source. The device 5 in FIG. 2 further includes an electronic safety mechanism 50. The electronic safety mechanism 50 includes a switch lock 60 actuated by a key 65.

FIG. 4 illustrates a perspective top view of the back side of the hand-held sterilization device. FIG. 4 shows the device 5 with a housing 10 and a handle 20 coupled to the housing 10. The device 5 shown in FIG. 4 includes a retractable hood 120 that is a pair of doors that open to reveal the ultraviolet light source. In FIG. 4, the doors are opened by actuating a key lock 130. The key lock is actuated by a key 65. The key 65 is the same key that actuates the switch lock on the electronic safety mechanism in FIG. 2. Thus, the invention contemplates that the same key 65 is used to expose the ultraviolet light source and to turn the light source on. The hood 120 doors are pivotably coupled to the housing by hinges 140 extending the length of the device housing 10. When the device 5 is operated and the UV radiation directed at the area to be sterilized, the hood doors are open and do not interfere with the path of the UV radiation. It should be appreciated that the hood 120 can also be electrically connected to the digital lock circuit 100 so that the hood 120 opens to reveal the light source only when the digital lock circuit 100 is actuated, for example, by an electromagnetic coupling. See Column 3, line 55-61; and Column 4, line 25-46.

It is implied herein that the use of a key to access the lock and thereby the safety switch in accordance with Whitehead (075), is equivalent to physically obstructing finger access as recited in Claim 1.

It is also implied herein that use of a key and lock in accordance with Whitehead (075), is equivalent to use of an opening adapted to allow passage of the activation tool, as recited in Claim 1.

Therefore it would have been obvious to one of ordinary skill in the art that the disinfecting apparatus and method of Ameseder (252) can be modified to use the key and safety switch in accordance with Whitehead (075), to provide a safety mechanism that must be actuated to close an electric circuit and actuate the device.

Whitehead (075) also discloses in FIG. 4 a perspective top view of the back side of the hand-held sterilization device. FIG. 4 shows the device 5 with a housing 10 and a handle 20 coupled to the housing 10. The device 5 shown in FIG. 4 includes a retractable hood 120 that is a pair of doors that open to reveal the ultraviolet light source (selectively blocking the transmission of UV light from the housing moveably attached to the light shield, as recited in Claim 19). In FIG. 4, the doors are opened by actuating a key lock 130. The key lock is actuated by a key 65. The key 65 is the same key that actuates the switch lock on the electronic safety mechanism in FIG. 2. Thus, the invention contemplates that the same key 65 is used to expose the ultraviolet light source and to turn the light source on. See Column 4, line 26-37.

Ameseder (252) in view of Whitehead (075) discloses nearly all the limitations of amended Claim 19 and new Claims 23-25, but does not disclose the use of a blocking means comprising an opening having a filter therein. Davidson (175); however, discloses that the lamp assembly 10 is readily portable and includes a housing 24 which has a handle 25 mounted at its rearward side. The housing 24 has an open forward face which is generally closed by a cover assembly 26. A pair of gas lamps 28 (the details of which are to be described) are supported in the housing 24 with an accurately shaped reflector 30 supported behind. A suitable filter system 32 (the

details of which are to be described) is located between the lamps 28 and the cover assembly 26. The cover assembly 26 has a pair of side by side slots 34 which when open will, of course, transmit the light energy from the lamps 28 as enhanced by the reflector 30. A pair of strap members 36 are slidably supported in guides 38 and 40 and can be selectively moved relative to the slots 34 whereby the area of light transmission through the slots 34 can be selectively varied. See Column 1, line 59-73.

Therefore it would have been obvious to one of ordinary skill in the art that the disinfection apparatus and method of Ameseder (252) in view of Whitehead (075) can be modified to use apertures and filters in accordance with Davidson (175), to provide controlled output of ultra-violet light.

Conclusion

4. The Amendment filed on 7-21-2003 has been considered but the arguments are moot in view of new grounds for rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

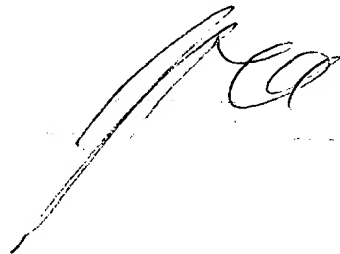
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip A Johnston whose telephone number is 305 7022. The examiner can normally be reached on 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 703 308 4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9318 for regular communications and 703 872 9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

PJ

December 15, 2003

A handwritten signature in black ink, appearing to be 'PJP', is located in the bottom right corner of the page.